

Yacht	<b>Vesper IV</b>	Rig	<b>Bermudian Sloop</b>
Sail number	<b>BRA2447</b>	Design	<b>Soto S40</b>
<b>TCC</b>	<b>1.190</b>	Series / built	<b>2008</b>
TCC 2	<i>1.133 with no downwind H/S</i>	Crew limit	<b>10 people</b>

### Performance indicators

Mainsail area	<b>58.96 m<sup>2</sup></b>	Mizzen / mizzen staysail area	<b>0.00 m<sup>2</sup></b> / <b>0.00 m<sup>2</sup></b>
Upwind headsail area	<b>40.56 m<sup>2</sup></b>	Displacement / length	<b>81</b>
Flying headsail area	<b>182.82 m<sup>2</sup></b>	Sail area / wetted surface	<b>3.55 (upwind sails)</b>
Spinnaker area	<b>0.00 m<sup>2</sup></b>	Sail area / displacement	<b>33.11 (upwind sails)</b>

### Hull & appendages

			source
Hull Length	LH	<b>12.30 m</b>	D
Bow overhang	BO	<b>0.07 m</b>	D
Stern overhang	SO	<b>0.24 m</b>	D
Waterline length	LWL	<b>11.99 m</b>	C
Stern height	Y	<b>0.04 m</b>	D
Beam	MB	<b>3.80 m</b>	D
Topside overhang	TSO	<b>0.61 m</b>	D
Freeboard at mast	FBI	<b>1.20 m</b>	D
Draught	T	<b>2.61 m</b>	D
Empty weight	EW	<b>4290 kg</b>	D
Fixed ballast weight	KW	<b>2180 kg</b>	P
Moveable ballast		<b>None</b>	
Keel type		<b>R2R1R1N1</b>	
Keel depth	KD	<b>2.29 m</b>	D
Keel chord	KC	<b>0.56 m</b>	D
Rudder type		<b>Spade</b>	
Rudder depth	RD	<b>1.98 m</b>	D
Rudder chord	RC	<b>0.36 m</b>	D
Propeller type		<b>Folding</b>	
Propeller blades	PRN	<b>2</b>	
Propeller diameter	PRD	<b>0.43 m</b>	E

### Mizzen staysail

Staysail luff length	LLY	<i>m</i>
Staysail luff perp	LPY	<i>m</i>

### Flying headsail (downwind headsail)

FH luff length	FHLU	<b>20.57 m</b>	D
FH leech length	FHLE	<b>17.38 m</b>	D
FH half width	FHHW	<b>11.61 m</b>	D
FH foot width	FHFL	<b>11.60 m</b>	D
* OR ... Area	FHA	<b>182.82 m<sup>2</sup></b>	C

### Rig

			source
Spar material		<b>Carbon fibre</b>	
Forestay length	FL	<b>16.81 m</b>	D
Foretriangle base	J	<b>4.85 m</b>	D
Flying h/sail tack length	FHTL	<b>7.33 m</b>	D
Spinnaker pole length	SPL	<i>m</i>	D
Mainsail hoist	P	<b>16.10 m</b>	O
Mainsail outhaul	E	<b>5.70 m</b>	O
Boom above sheer	BAS	<b>1.61 m</b>	E
Mizzen hoist	PY	<i>m</i>	
Mizzen outhaul	EY	<i>m</i>	

### Main sail

Half width	MHW	<b>3.92 m</b>	A
Three quarter width	MTW	<b>2.75 m</b>	A
Upper width	MUW	<b>2.01 m</b>	A
Construction		<b>Laminated</b>	
Reefing		<b>Slab</b>	

### Upwind headsail

Luff length	HLU	<b>15.97 m</b>	A
Luff perpendicular	HLP	<b>4.94 m</b>	A
Half width	HHW	<b>2.58 m</b>	A
Three quarter width	HTW	<b>1.35 m</b>	A
Foot height	HFH	<b>0.20 m</b>	A
Construction		<b>Laminated</b>	
Reefing		<b>Change Sail</b>	

### Spinnaker (downwind headsail)

* Luff length	SLU	<i>m</i>
* Leech length	SLE	<i>m</i>
* Half width	SHW	<i>m</i>
* Foot width	SFL	<i>m</i>
* OR ... Area	SPA	<i>m<sup>2</sup></i>

**Measurement source:** A=Authenticated; O=Owner measured; S=Sister vessel; P=Published; C=Calculated

**System data source:** D=Database derived; E=Estimated

**TCC calculated** on 07/02/2024 at 10:08:16

**IMPORTANT: see notes on page 2 for appropriate use and validity**

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# Certificate notes

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## 1. Correct use of the published ratings

Multiply the elapsed time by the TCC to obtain corrected time.

The TCC is calculated for the declared sail plan, which may or may not include a downwind headsail. For boats without a downwind headsail the words "(no downwind H/S)" appear after the TCC.

Boats with a full sailplan also have a "TCC 2" which excludes all downwind headsails. Strictly this is for use only when racing in a class specifically for boats without downwind headsails..

If boats with and without downwind headsails race together, the boats without downwind sails will have an advantage on upwind legs, and a disadvantage off the wind.

## 2. Data quality

The fairest ratings will result from accurate measurement; ratings calculated using a significant amount of estimated and published data are far more likely to be out of line with expectations than those using measured and sister ship data. Owners must notify the rating office of any changes or errors in the rating data.

## 3. Applicability

This certificate is issued for the sole purpose of correcting elapsed times recorded in yacht races. It is not to be used for any other purpose.

## 4. Validity

Unless stated to the contrary, or superseded, this certificate is valid until the end of the calendar year in which it was issued. The validity can be checked by referring to the certificates published at: [www.vprs.org/ratings.html](http://www.vprs.org/ratings.html)

## 5. Additional information

## 6. Stability

An SSS base value provides a guide to the stability of a boat but does not guarantee safety or freedom of risk from capsize or sinking. The safety of a boat is the sole responsibility of the skipper who must ensure that the boat is fully found, thoroughly seaworthy, and operated by a crew sufficient in number and experience who are physically fit to face bad weather. The SSS base value does not constitute any warranty as to the seaworthiness of any boat or the safety of any gear and shall not limit the absolute responsibility of the skipper of the boat.

Guard rails fitted	Yes	
Dayboat	No	
<b>SSS base value</b>	<b>24</b>	Valid only for data on this certificate.